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LTR-NRC-13-46

June 27, 2013

Subject: Notification of Error in the Small Break LOCA Calculations for WCAP-17524-P, "AP1000 Core Reference Report"

Reference: Westinghouse Letter LTR-NRC-12-25, "Submittal of WCAP-17524-P, Revision 0 and WCAP-17524-NP, Revision 0, 'AP1000 Core Reference Report,' (Proprietary/Non-Proprietary), Project 793." dated March 6, 2012

Westinghouse submitted WCAP-17524-P "AP1000 Core Reference Report" to the NRC (Document Control No.: LTR-NRC-12-25 dated March 6, 2012, ADAMS Accession # ML12075A227) for review and issuance of a Safety Evaluation (SE). This topical report provided the description and justification for the Advanced First Core, which also included an update to the accident analyses documented in Chapter 15 of the Design Control Document (DCD). The purpose of this letter is to inform the NRC of a recently identified error that impacts the conclusions documented in this report and to outline actions that will be undertaken to address this issue.

In early 2013, work was performed by Westinghouse to disposition a corrective action relative to the assumed single failure assumption in the AP1000<sup>®</sup> Pressurized Water Reactor Small Break LOCA (SBLOCA) analysis. An error was made in the analysis work, resulting in an incorrect conclusion that the current SBLOCA analysis presented in the Core Reference Report (CRR) continues to be representative of the limiting analysis results relative to 10 CFR 50.46 acceptance criteria. Preliminary calculations correcting the error are showing worse results for the alternate single failure scenario, changing the conclusions of the analysis. While preliminary evaluations have concluded that the acceptance criteria associated with the SBLOCA event will continue to be met, it is clear that the analyses presented in the Chapter 15 updates for this event will need to be revised to reflect the new limiting case and their derived results.

The description of the SBLOCA event in the CRR will be affected by these revised calculations. Once the revised calculations have been completed, the impacted sections of the CRR will be transmitted to the NRC as supplemental information by August 22, 2013. Westinghouse would propose that this supplemental information be reviewed by the NRC prior to issuance of the SE for the CRR, but that the

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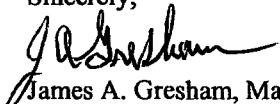
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incorporation of the changes into the main body of the CRR occur with the issuance of the approved version of the Topical Report.

If you have any questions or require additional information, please contact Jim Gresham at (412) 374-4643.

Sincerely,

  
James A. Gresham, Manager  
Regulatory Compliance